

2003 Annual Compliance Report
of
Public Water System Violations
in
The State of Maine

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2003 Annual Compliance Report

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I. Overview

The Maine Drinking Water Program: An Overview

The Environmental Protection Agency (EPA) established the Public Water System Supervision (PWSS) Program under the authority of the 1974 Safe Drinking Water Act (SDWA). Under the SDWA and the 1986 Amendments, EPA set national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs) and Maximum Disinfectant Residual Levels (MRDLs). For some regulations, EPA establishes treatment techniques in lieu of an MCL to control unacceptable levels of contaminants in water.

The agency also regulates how often public water systems (PWSs) monitor their water for contaminants and report the monitoring results to the states or EPA. Generally, the larger the population served by a water system, the more frequent the monitoring and reporting (M/R) requirements. In addition, EPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development.

PWSs are required to notify the public when they have violated these regulations. The 1996 Amendments to the SDWA require public notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, and steps that the PWS is undertaking to correct the violation and possibility of alternative water supplies during the violation.

The SDWA allows states and territories to seek EPA approval to administer their own PWSS Programs. The authority to run a PWSS Program is called primacy. For a state to receive primacy, EPA must determine that the state meets certain requirements laid out in the SDWA and the regulations, including the adoption of drinking water regulations that are at least as stringent as the Federal regulations and a demonstration that they can enforce the program requirements.

The 1986 SDWA Amendments gave Indian Tribes the right to apply for and receive primacy. EPA currently administers PWSS Programs on all Indian lands except the Navajo Nation, which was granted primacy in late 2000.

Annual State PWS Report

Each quarter, primacy states submit data to the Safe Drinking Water Information System (SDWIS/FED), an automated database maintained by EPA. The data include, but are not limited to PWS inventory information, the incidence of Maximum Contaminant Level, Maximum Residual Disinfectant Level, monitoring, treatment technique violations, and information on enforcement activity related to those violations. Section 1414(c)(3) of the Safe Drinking Water Act requires states to provide EPA with an annual report of violations of the primary drinking water standards. This report provides the numbers of violations in each of six categories: MCLs, MRDLs, treatment techniques, variances and exemptions,

significant monitoring violations, and significant consumer notification violations. Data retrieved from SDWIS/FED form the basis of this report.

Public Water System

A public water system (PWS) is defined as a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. There are three types of PWSs. PWSs can be community (such as towns), non-transient non-community (such as schools or factories), or transient non-community systems (such as rest stops or parks). For this report when the acronym “PWS” is used, it means systems of all types unless specified in greater detail.

Maximum Contaminant Level

Under the SDWA, the EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known Maximum Contaminant Levels (MCLs).

Maximum Residual Disinfection Level

The EPA sets national limits on residual disinfectant levels in drinking water to reduce the risk of exposure to disinfectant byproducts formed when public water systems add chemical disinfectant for either primary or residual treatment. These limits are known as Maximum Residual Disinfection Levels (MRDLs).

Treatment Techniques

For some regulations, the EPA establishes treatment techniques (TTs) in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, bacteria, and turbidity.

Variances and Exemptions

A primacy state can grant a PWS a variance from a primary drinking water regulation if the characteristics of the raw water sources reasonably available to the PWS do not allow the system to meet the MCL. To obtain a variance, the system must agree to install the best available technology, treatment techniques, or other means of limiting drinking water contamination that the EPA Administrator finds are available (taking costs into account), and the state must find that the variance will not result in an unreasonable risk to public health. A variance must be reviewed not less than every 5 years to determine if the PWS remains eligible.

A state with primacy can grant an exemption temporarily relieving a PWS of its obligation to comply with an MCL, treatment technique, or both if the system’s noncompliance results from compelling factors (which may include economic factors) and the system was in operation on the effective date of the MCL or treatment technique requirement. The state will

require the PWS to comply with the MCL or treatment technique as expeditiously as practicable, but not later than 3 years after the otherwise applicable compliance date.

Monitoring

A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCL. If a PWS fails to have its water tested as required or fails to report test results correctly to the primacy agent, a monitoring violation occurs.

Significant Monitoring Violations

For this report, significant monitoring violations are generally defined as any major monitoring violation that occurred during the calendar year of the report. A major monitoring violation, with rare exceptions, occurs when no samples were taken or no results were reported during a compliance period.

Consumer Notification

Every Community Water System is required to deliver to its customers a brief annual water quality report. This report is to include some educational material, and will provide information on the source water, the level of any detected contaminants, and compliance with drinking water regulations.

Significant Consumer Notification Violations

For this report, a significant public notification violation occurred if a community water system completely failed to provide its customers the required annual water quality report.

II. Calendar Year 2003 Narrative Summary of Violations

1. **Total Coliform (Bacteria) Rule**

There were 360 Maximum Contaminant Level violations incurred among 222 PWSs, and 1005 Failure to Monitor/Report violations incurred among 532 PWSs. The grand total of 1365 Total Coliform Rule violations is a decrease from the grand total of 1543 violations reported for calendar year 2002.

2. **Volatile Organic Contaminants (Phase II/V Rule)**

There were zero Maximum Contaminant Level violations and one Failure to Monitor/Report violation. The PWS that incurred this violation has since collected the required sample.

3. **Synthetic Organic Contaminants (Phase II/V Rule)**

There was one Maximum Contaminant Level violation and zero Failure to Monitor/Report violations. The PWS that incurred the Maximum Contaminant Level violation has since returned to compliance after completing remediation and installation of treatment.

4. **Inorganic Contaminants (Phase II/V Rule)**

There were five Maximum Contaminant violations incurred among five PWSs. One PWS exceeded the Maximum Contaminant Level for Barium and is now treating for Barium removal. The other four PWSs exceeded the Maximum Contaminant Level for Nitrate and have either installed treatment or are investigating treatment options; all are on an increased monitoring cycle.

There were 37 Nitrate Failure to Monitor/Report violations incurred among 13 PWSs for annual, quarterly, or monthly monitoring periods.

5. **Lead and Copper Rule**

There were 62 Treatment Technique violations incurred among 54 PWSs and 53 Failure to Monitor/Report violations incurred among 32 PWSs.

6. Radionuclides Rule

There was one Maximum Contaminant Level violation and zero Failure to Monitor/Report violations during the year.

7. Surface Water Treatment Rule

There were 13 Treatment Technique violations incurred by 12 PWSs and zero Failure to Monitor/Report violations.

8. Interim Enhanced Surface Water Treatment Rule

There were zero Treatment Technique violations and two Failure to Monitor/Report violations incurred by two PWSs.

9. Stage 1 Disinfectants / Disinfection By-Products Rule

There were zero Treatment Technique violations, zero Failure to Monitor/Report violations, and four Maximum Contaminant Level violations for Total Haloacetic Acids incurred by two PWSs. These PWSs are on a quarterly monitoring schedule and are evaluating treatment solutions.

10. Consumer Confidence Rule

There were 29 significant Consumer Notification violations incurred by 22 PWSs.

III. Summary of Violations by Rule

(SDWIS/FED Data Report)

IV. General PWS Inventory Information

Current Tabulation of Public Water Systems in Maine by Type and Total
Population Served as of June 21, 2004

<u>PWS Type</u>	<u>Number of Active Systems</u>	<u>Population Served</u>
Community	396	615,685
Non-Transient, Non-Community	367	71,287
Transient, Non-Community	1205	196,866
Bottled Water	156	3767
Total Regulated	2124	887,605

V. Detailed List of all Violations issued in 2003

(SDWIS/Fed Data report)